80/250/RVC

RESULT OF VOTING ON CDV

Project number:	Reference number of the CD
80/60872-3 Ed. 1	**80/227/CDV**
IEC/TC or SC	Date of circulation
80	2000-01-14

Title of the TC or SC concerned
Maritime navigation and radiocommunication equipment and systems

Title of the committee draft:
IEC 60872 - Maritime navigation and radiocommunication equipment and systems - Radar plotting aids - Part 3: Electronic plotting aid (EPA) - Performance requirements - Methods of testing and required test results

The above-mentioned document was circulated to National Committees with a request that voting take place for approval for circulation as an FDIS (or publication as a Technical Report)

Voting results

see printout attached

Comments received – see annex[1]

In the case that the approval criteria for acceptance have been met,

a ☒ The enquiry draft for vote (CDV) will be registered as an FDIS by (date) 2000-01

DECISION OF THE CHAIRMAN (in cooperation with the secretariat), in the case that the approval criteria for acceptance have not been met or in the case of a draft Technical Report

b ☐ The enquiry draft for vote (CDV) will be published as a Technical Report by (date) ……

c ☐ A revised committee draft will be circulated as an enquiry draft for vote (CDV) by (date) ……

d ☐ A revised committee draft will be circulated for comment by (date) ……

e ☐ The committee draft and comments will be discussed at the next meeting (date) ……

NOTE — In the case of a proposal *b*, *c* or *d* made by the chairman, P-members objecting to such a proposal shall inform the Central Office with copy to the secretary in writing within 2 months of the circulation of this compilation (see 2.6.5 of Part 1 of the ISO/IEC Directives).

Name or signature of the Secretary	Name or signature of the Chairman
P F C GRIFFITHS (1999-12-18)	A P NORRIS (1999-12-18)

[1] to be collated on Form 8C and annexed.

Result of Voting on CDV - Document 80/227/CDV

Project: IEC 60872-3 Ed.1

Draft IEC 60872-3: Maritime navigation and radiocommunication equipment and systems - Radar plotting aids - Part 3: Electronic plotting aid (EPA) - Performance requirements - Methods of testing and required test results

Circulation Date: 1999-04-23
Closing Date: 1999-09-30

Country	Status	Sent	Received	Vote	Comments
Belgium	P	1999-09-29	1999-09-29	Y	-
China	P	1999-09-27	1999-09-27	Y	-
Czech Republic	O	1999-09-28	1999-09-28	Y	-
Denmark	P	1999-09-29	1999-09-29	A	-
Finland	P	1999-09-29	1999-09-29	A	-
France	P	1999-09-30	1999-09-30	N	Y
Germany	P	1999-09-22	1999-09-22	Y	-
Greece	O	1999-09-27	1999-09-30	A	-
Ireland	O	1999-09-30	1999-09-30	Y	-
Italy	P	1999-09-15	1999-09-15	Y	-
Japan	P	1999-09-24	1999-09-24	Y	Y
Mexico	O	1999-10-07	1999-10-07	Y	-
Netherlands	P	1999-09-28	1999-09-28	Y	-
Norway	P	1999-09-23	1999-09-23	Y	-
Portugal	-	1999-09-22	1999-09-22	A	-
Russian Fed.	P	1999-06-28	1999-06-28	Y	-
Sweden	P	1999-09-30	1999-09-30	Y	-
U.S.A.	P	1999-09-21	1999-09-21	Y	-
United Kingdom	P	1999-07-23	1999-07-23	Y	-

		Approval Criteria	Result
P-members voting: 12			
P-members in favour: 11 = 92 %		**>= 67%**	**APPROVED**
Total votes cast: 14	**Total against: 1 = 7 %**	**<= 25%**	**APPROVED**
Final Decision:			**APPROVED**

NOTES

1 Vote: Does the National Committee agree to the circulation of the draft as a FDIS:
Y = In favour; N = Against; A = Abstention.
2 Only votes received before the closing date are counted in determining the decision.
Late Votes:Mexico; (1).
3 Abstentions are not taken into account when totalizing the votes.

4 P-members not voting: Canada; Egypt; Romania; (3).

Annex

Date	Document
1999-12-18	80/227/CDV

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
France	General		Technical	Due to the evolution of electronic systems, this proposal is obsolete		The draft standard is as contained as a requirement in IMO SOLAS Chapter V. Although it may become obsolete in the future, it is currently relevant.
Japan	1 Scope	3rd para	editorial	'electromagnetic compass conforming to ISO 11606'	Add "or THMD MSC.(70)" to read 'electromagnetic compass conforming to ISO 11606 or THMD MSC.(70)'	Agreed. Will use the actual IMO Resolution reference and include in the normative references.
Japan	3.3.12.2	2nd para.	editorial	"regarded as complying with 3.3.4.2 if the design is such that, "	Change to "regarded as complying with ~~3.3.4.2~~ the above requirement if the design is such that, "	Agreed. 3.3.4.2.does not exist.
Japan	3.3.13.1	2nd line	editorial	within a minimum, range and time, chosen by the observer.	Commas before and after range and time should be removed.	Agreed.
Japan	4.2.2	Table 1	editorial	- Test scenario	Move this title from beneath the table to above the table.	Agreed.
Japan	4.2.3		editorial	With the gain reduced to a minimum or off. Own ship data course and speed shall be set to the required values by using "manual settings" in steps.	With the gain reduced to a minimum or off, own ship ~~data~~ course and speed shall be set to the required values by using manual settings ~~in steps~~. (Remove quotation marks)	Agreed.

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
Japan	4.2.3	3rd para.:	editorial	Target data CPA, TCPA,...values used by the EUT are read out and recorded.	Target data <u>including</u> CPA, TCPA,...values ~~used by~~ <u>entered to</u> the EUT ~~are~~ <u>shall be</u> read out and recorded.	Agreed.
Japan	4.2.4		editorial	1 CPA ± 0.1 nautical miles (nm) for …. 2 TCPA ± min …. 3 Course ± 5° 4 Speed ±1 knot	1 CPA: ±0.1 ~~nautical miles (~~nm~~)~~ for _. 2 TCPA<u>:</u> ±2 min …..(Add a colon) 3 Course: ±5° (Add a colon) 4 Speed: ±1 ~~knot~~ kt (Add a colon; Use kt instead of knot)	Agreed.
Japan	4.4		editorial	Check by inspection of the equipment, for compliance with the requirements of 3.3.4.	Remove the sentence after the comma. Check by inspection of the EUT ~~equipment, for compliance with the requirements of 3.3.4~~.	Agreed.
Japan	Annex B	Scenario 1:	editorial	Target with nearly <u>the</u> same course....	Add ”the” before same. (This is not a request, Just for info, some members of EIAJ want to add : Course change rate of own ship is 10°/s. Also it would be necessary to define the acceleration and deceleration of own ship when its speed is changed to check the target true speed and course. Some do not.)	Agreed. Note the comments from Germany that follow.
Japan	Annex B	Scenario 3:	T	Plot 2: 2.1 Plot 3: 2.1	Change to Plot 2: 3.0 Plot 3: 3.0	See comments from Germany below and amended Scenarios.

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
Japan	all scenario tables.		editorial	Time (s) in	Change (s) to (min).	Agreed.
Germany	4.2.3 Annex B		Technical	The scenarios 5 and 6 given in annex B of the standard give incorrect results in plot intervals 4 (scenario 5) and 6 (scenario 6) with some correctly implemented EPA's. The reason is the inclusion of own ship and target data changes at a time between plot intervals. To avoid this, these intra-plot stages given in the scenarios should be discarded (to keep scenarios congruent in all scenarios). In this case own ship changes has to be performed at the beginning of the interval (immediately after the last plot has been set).	4.2.3 Method of measurement: add as 3. sentence: Required own ship changes has to be performed at the beginning of the interval (immediately after the last plot has been set). Annex B Change Scenario data according to annex of this mail.	Agreed. See amended scenarios attached to these comments. It is noted that all scenarios have changed, not just 5 and 6. NOTE BY THE SECRETARY TC 80 – Although these proposals arrived after the close of voting, they have all been accepted. The reasons for change have been unanimously agreed by the Working Group.

ANNEX

Proposal from Germany – Scenarios – Annex B

scenario 1: after 9 min change ...

		Own ship		Marker				Target Data			
	time [min]	SPD [kn]	CRS [°]	VRM [NM]	EBL [°]	SPD [kn] R	CRS [°] R	SPD [kn] T	CRS [°] T	CPA [NM]	TCPA [min]
1	0.00	25	270	5.00	315.00						
2	3.00	25	270	4.85	315.00	3.0	135.0	23.0	264.7	0.0	97.0
3	6.00	25	270	4.70	315.00	3.0	135.0	23.0	264.7	0.0	94.0
4	9.00	25	270>315	4.55	315.00	3.0	135.0	23.0	264.7	0.0	91.0
5	12.00	25	315	4.13	302.64	20.5	194.7	23.0	264.7	3.9	3.7
6	15.00	25	315	3.94	288.32	20.5	194.7	23.0	264.7	3.9	0.7
7	18.00	25	315	4.01	273.54	20.5	194.7	23.0	264.7	3.9	-2.3
8	21.00	25	315	4.32	260.11	20.5	194.7	23.0	264.7	3.9	-5.3

scenario 2: after 9 min change ...

		Own ship		Marker			Target Data				
	time [min]	SPD [kn]	CRS [°]	VRM [NM]	EBL [°]	SPD [kn] R	CRS [°] R	SPD [kn] T	CRS [°] T	CPA [NM]	TCPA [min]
1	0.00	0	0	5.00	135.00						
2	3.00	0	0	4.50	135.00	10.0	315.0	10.0	315.0	0.0	27.0
3	6.00	0	0	4.00	135.00	10.0	315.0	10.0	315.0	0.0	24.0
4	9.00	0 > 5	0 > 90	3.50	135.00	10.0	315.0	10.0	315.0	0.0	21.0
5	12.00	5	90	2.83	138.58	14.0	300.4	10.0	315.0	0.9	11.5
6	15.00	5	90	2.18	144.35	14.0	300.4	10.0	315.0	0.9	8.5
7	18.00	5	90	1.56	154.84	14.0	300.4	10.0	315.0	0.9	5.5
8	21.00	5	90	1.06	176.73	14.0	300.4	10.0	315.0	0.9	2.5

Scenario 3: after 6 min change ...

		Own ship		Marker			Target Data				
	time [min]	SPD [kn]	CRS [°]	VRM [NM]	EBL [°]	SPD [kn] R	CRS [°] R	SPD [kn] T	CRS [°] T	CPA [NM]	TCPA [min]
1	0.00	10	180	3.00	135.00						
2	3.00	10	180	3.00	135.00	0.0	0.0	10.0	180.0	2.1	636396 103067 89300.0
3	6.00	10 > 5	180	3.00	135.00	0.0	0.0	10.0	180.0	2.1	636396 103067 89300.0
4	9.00	5	180	3.18	138.19	5.0	180.0	10.0	180.0	2.1	-28.5
5	12.00	5	180	3.37	141.02	5.0	180.0	10.0	180.0	2.1	-31.5
6	15.00	5	180	2.70	141.02	13.4	321.0	10.0	302.7	0.0	12.1
7	18.00	5	180	2.03	141.02	13.4	321.0	10.0	302.7	0.0	9.1
8	21.00	5	180	1.37	141.02	13.4	321.0	10.0	302.7	0.0	6.1

Scenario 4:

after 9 min change ...

change of drawing:

		Own ship		Marker			Target Data				
	time [min]	SPD [kn]	CRS [°]	VRM [NM]	EBL [°]	SPD [kn] R	CRS [°] R	SPD [kn] T	CRS [°] T	CPA [NM]	TCPA [min]
1	0.00	10	90	5.00	90.00						
2	3.00	10	90	4.00	90.00	20.0	270.0	10.0	270.0	0.0	12.0
3	6.00	10	90	3.00	90.00	20.0	270.0	10.0	270.0	0.0	9.0
4	9.00	10	90>100	2.00	90.00	20.0	270.0	10.0	270.0	0.0	6.0
5	12.00	10	100	1.01	85.08	19.9	275.0	10.0	270.0	0.2	3.0
6	15.00	10	100	0.17	5.00	19.9	275.0	10.0	270.0	0.2	-0.0
7	18.00	10	100	1.01	284.92	19.9	275.0	10.0	270.0	0.2	-3.0
8	21.00	10	100	2.00	280.00	19.9	275.0	10.0	270.0	0.2	-6.0

Scenario 5 :
After 6 min change ...
After 12 min change ...

		Ownship		Marker				Target Data			
	time [min]	SPD [kn]	CRS [°]	VRM [NM]	EBL [°]	SPD [kn] R	CRS [°] R	SPD [kn] T	CRS [°] T	CPA [NM]	TCPA [min]
1	0.00	25	45	5.00	30.00						
2	3.00	25	45	4.50	30.00	10.0	210.0	15.6	54.6	0.0	27.0
3	6.00	25>15	45	4.00	30.00	10.0	210.0	15.6	54.6	0.0	24.0
4	9.00	15	45	3.75	30.00	5.0	210.0	10.3	52.3	0.0	45.0
5	12.00	15	45>315	3.50	30.00	5.0	210.0	10.3	52.3	0.0	42.0
6	15.00	15	315	3.89	43.66	19.2	103.0	10.2	52.2	3.3	-6.2
7	18.00	15	315	4.46	54.34	19.2	103.0	10.2	52.3	3.3	-9.2
8	21.00	15	315	5.14	62.41	19.2	103.0	10.3	52.3	3.3	-12.2

Scenario 6:
after 9 min change ...
After 15 min change ...

		Ownship		Marker			Target Data				
	time [min]	SPD [kn]	CRS [°]	VRM [NM]	EBL [°]	SPD [kn] R	CRS [°] R	SPD [kn] T	CRS [°] T	CPA [NM]	TCPA [min]
1	0.00	25	180	5.50	213.00						
2	3.00	25	180	4.00	229.00	27.4	359.6	14.8	358.2	3.0	3.9
3	6.00	25	180	3.50	229.00	10.0	49.0	19.9	157.7	0.0	21.0
4	9.00	25	180>200	3.00	229.00	10.0	49.0	19.9	157.7	0.0	18.0
5	12.00	25	200	2.75	229.00	5.0	49.0	20.8	193.3	0.0	33.0
6	15.00	25 > 5	200	2.50	229.00	5.0	49.0	20.8	193.3	0.0	30.0
7	18.00	5	290	3.33	214.64	21.9	180.2	20.8	193.3	1.9	-7.5
8	21.00	5	290	4.28	206.31	21.9	180.2	20.8	193.3	1.9	-10.5